

CASE STUDY

UMBRA GROUP

COMPANY PROFILE

UMBRA GROUP S.P.A., leader of the Umbra Group, was founded in 1972 in Foligno (PG), Italy. Since then the Company has obtained a large number of successes that have taken it, from a local reality, to interface with a global panorama. The Umbra Group is now considered a reality at the forefront both in the aeronautical sector, of which it is the world leader in the production of recirculating ball screws, and in the industrial market.

To date, the Group has about 1,200 employees and consists of seven companies in Italy, the United States and Germany. This business development depends on constant improvement, on the strong desire for innovation and on large investments in the field of Research and Development. All this has led, over the years, to an exponential growth of the product portfolio, to an improvement in processes and to a motivated and prepared workforce.

ANALYSIS

Precisely with the aim of improving internal processes, the Umbra Group has undertaken, a few years ago, a path aimed at re-engineering the "Planning, Programming and Control Process" (PPP&C) of productive resources. In particular, UMBRAGROUP needed a reliable system for scheduling, data collection and production progress of the grinding departments (high precision mechanical machining on gears and bearings) and turning (mechanical processing in which small metal parts are produced) of the Foligno plant.

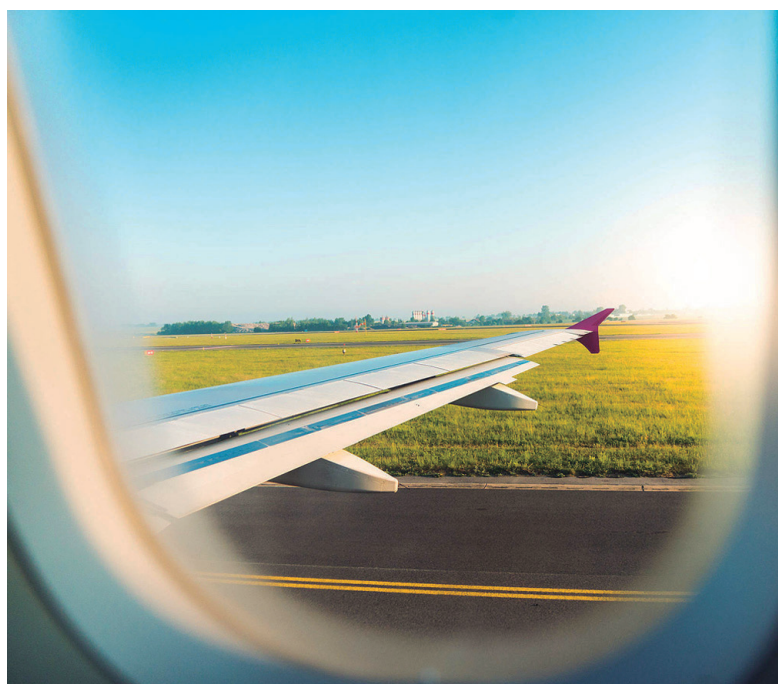
To do this, UMBRAGROUP chose sedapta implementing the following modules of the suite:

- » **Factory Scheduling**
- » **Shop Floor Monitor**

TARGETS

In order to obtain the benefits deriving from the implementation of this new solution, as they were evaluated in the As-Is analysis phase, the essential elements at the management level were the following:

- » Review all cycles and technical data: setup and processing times, main and alternative resources and any missing phases
- » Enter the missing cycles
- » Manage bills of materials
- » Perform the planning in a correct and structured way
- » Create a feasible and balanced Main Production Plan.



COMPANY
UMBRA GROUP S.P.A.



SECTOR
MANUFACTURER OF
RECIRCULATING BALL
SCREWS IN THE
AERONAUTICAL SECTOR
AND IN THE INDUSTRIAL
MARKET



COMPANY SIZE
1 PRODUCTIVE SITE
1,200 EMPLOYEES



TURNOVER
€ 125 MLN (2017)



SEDAPTA MODULES
FACTORY SCHEDULING
SHOP FLOOR MONITOR

SOLUTION

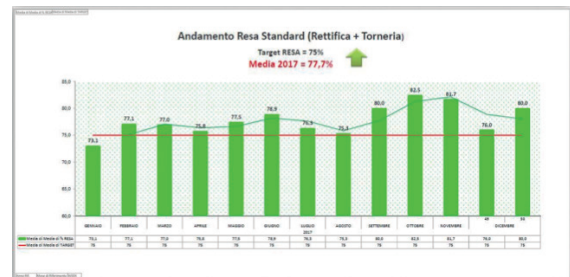
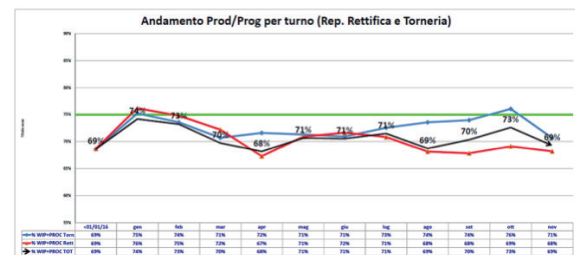
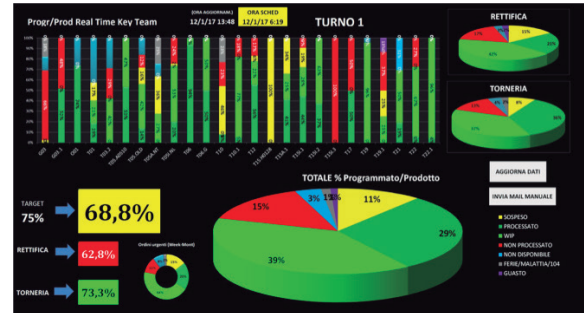
The main activities related to Operational Planning in the new PPP&C process concerned:

- » The preventive analysis of the Main Production Plan;
- » Daily scheduling for Production and Contractors;
- » Progress check including:
 - » Graphical projection with respect to the Team Work Plan on pie charts;
 - » Trend control per work shift;
 - » Automatic email sending with production control charts to specific users;
 - » Quick consultation of the details of the percentages;
 - » The database performance archive;
- » The operators' squaring and control of final accounts;
- » Programmed/Produced real-time control and Return;
- » Control of KPI Production Performance (eg, Production Volume, Efficiency, Use, OEE, Machine downtimes and related causes, etc.);
- » Compliance with the dates and appointments of the missing components of the frozen Assembly Plan (last two weeks);
- » Optimization of shift/overtime and workforce distribution (eg preventive analysis of load profiles and optimization of work shifts, number of operators for each team ...)

BENEFITS

The implemented solution therefore allowed to:

- » Real-time monitor of resources in the workshop
- » Resource schedule on a daily base
- » Predict the delivery date of a work order by improving the service level
- » Check and respect the Work Plan (Programmed/Produced)
- » Have production Performance Indicators (KPIs) and related statistics available
- » Be able to analyse the costs of the finished product.



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